

Claims

1. A system for use in deploying one or more electrode assemblies, comprising:
5 an elongated guiding device having a proximal end and a distal end;
an expandable fixation member coupled to the distal end; and
a coupling member adjacent to the elongated guiding device adapted to slidably engage the one or more electrode assemblies, whereby the each of the one or more electrode assemblies may be located at respective predetermined sites of implant.

10 2. The system of Claim 1, wherein the coupling member is slidably coupled to the elongated guiding device.

15 3. The system of Claim 2, wherein the coupling member is a rail member.

4. The system of Claim 3, wherein the rail member is selected from the group consisting of a Y-rail, an H-rail, a K-rail, and a T-rail.

20 5. The system of Claim 2, wherein the coupling member has means for preventing each of the one or more electrode assemblies from shifting laterally as the one or more electrode assemblies are slid along the coupling member.

6. The system of Claim 1, wherein the coupling member and the elongated guiding device are a unified structure.

25 7. The system of Claim 1, wherein the expandable fixation member is an inflatable member.

8. The system of Claim 1 or 7, wherein the elongated guiding device includes an infusion lumen and a delivery port in fluid communication with the infusion lumen whereby fluoro-visible medium may be injected to obtain a venogram.

5 9. The system of Claim 8, wherein the infusion lumen is included in the coupling member.

10. The system of Claim 8, wherein the delivery port is located proximal to the fixation member.

10 11. The system of Claim 1 wherein the expandable fixation member is an expandable member formed of braided conductive fibers.

12. The system of Claim 3, wherein the rail member includes a flexible extension adapted to allow each of the one or more electrode assemblies to more readily engage the rail member.

13. The system of Claim 6, wherein the coupling member is a channel extending longitudinally along a portion of the elongated guiding device.

20 14. An implantable medical device, comprising:
an elongated guiding device having a proximal end and a distal end;
an expandable fixation member coupled to the distal end;
a coupling member adjacent to the elongated guiding device; and
at least one electrode assembly adapted to slidably engage the coupling member.

25 15. The system of Claim 14, wherein the coupling member is slidably coupled to the elongated guiding device.

16. The system of Claim 15, wherein the coupling member is a rail member.

17. The system of Claim 16, wherein each of the at least one electrode assemblies includes a channel member to slidably engage the rail member.

18. The system of Claim 17, wherein the rail member is selected from the group consisting of a Y-rail, an H-rail, a K-rail, and a T-rail.

19. The system of Claim 14, wherein the coupling member is a channel member.

20. The system of Claim 19, wherein each of the at least one electrode assemblies includes a rail member to slidably engage the channel member.

21. The system of Claim 14, wherein the coupling member has a rail for preventing each of the one or more electrode assemblies from twisting as the electrode assemblies slidably engage the coupling member.

22. The system of Claim 14, wherein the coupling member and the elongated guiding device are a unified structure.

23. The system of Claim 14, wherein the expandable fixation member is an inflatable member.

21. The system of Claim 14 wherein the expandable fixation member is an expandable member formed of braided conductive fibers.

22. The system of Claim 14, wherein predetermined ones of the at least one electrode assembly includes fixation means.

5 23. The system of Claim 15, wherein the coupling member includes a fastening member for temporarily maintaining the coupling member in a fixed positioned relative to the guiding device.

10 24. An implantable medical device, comprising:
an elongated guiding device having a proximal end and a distal end;
an expandable fixation member coupled to the distal end; and
at least one electrode assembly adapted to slidably engage the elongated guiding device.

15 25. The system of Claim 24, wherein each of the at least one electrode assembly includes a lumen to slidably engage the elongated guide device.

20 26. The system of Claim 25 wherein the expandable fixation member is an expandable member formed of braided fibers.

25 27. The system of Claim 25, wherein the expandable fixation member is an inflatable member.

28. The system of Claim 26 or 27, wherein the elongated guiding device includes an infusion lumen and a delivery port in fluid communication with the infusion lumen whereby fluoro-visible medium may be injected to obtain a venogram.

29. A method of placing medical electrical leads within a body, comprising the methods of:

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- a.) advancing a guiding device to a predetermined site of implant;
- b.) deploying fixation means coupled to the guiding device to maintain the guiding device at the predetermined site of implant; and
- c.) deploying an electrode to the predetermined site of implant.

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- 30. The method of Claim 29, including the methods of retracting the fixation means; and re-locating the guiding device to a second predetermined site of implant.
- 10 31. The method of Claim 30, and including the methods of repeating methods b.) and c.) to deploy a second electrode at the second predetermined site of implant.
- 15 32. The method of Claim 29, wherein the guiding device includes a coupling means, and wherein method c.) includes the method of slidably engaging the electrode to the coupling means.
- 20 33. The method of Claim 29, wherein the coupling means is slidably attached to the guiding device, and further including the methods of d.) re-positioning the coupling means to locate another implant site; and repeating method c.) for an additional electrode.
- 25 34. The method of Claim 33, and including the methods of repeating methods c.) through d.) for a predetermined number of electrode assemblies.
- 35. The method of Claim 29, wherein the guiding device includes a lumen for delivering fluoro visible media, and wherein method c.) includes the method of injecting fluoro visible media via the lumen.

36. The method of Claim 29, wherein method b.) includes the method of inflating an inflation member.

5 37. The method of Claim 29, wherein the guiding device includes an inner lumen, wherein the fixation means is an expandable member loaded into the inner lumen, and wherein method b.) includes the method of causing the expandable member to exit the inner lumen.

10 38. The method of Claim 31, wherein the electrode includes means for affixing the electrode to tissue, and wherein the retracting method includes the methods of:

- retracting the fixation means;
- positioning the fixation means in proximity to the electrode;
- deploying the fixation means to aid in affixing the electrode to tissue;
- retracting the fixation means; and
- re-locating the guiding device to the second predetermined site of implant.

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